



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/583,220

06/16/2006

Atsushi Miyazaki

JFE-06-1129

7655

35811 7590 05/05/2011
IP GROUP OF DLA PIPER LLP (US)
ONE LIBERTY PLACE
1650 MARKET ST, SUITE 4900
PHILADELPHIA, PA 19103

EXAMINER

KIECHLE, CAITLIN ANNE

ART UNIT

PAPER NUMBER

1733

NOTIFICATION DATE

DELIVERY MODE

05/05/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pto.phil@dlapiper.com

Office Action Summary	Application No. 10/583,220	Applicant(s) MIYAZAKI ET AL.	
	Examiner CAITLIN FOGARTY	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-33 is/are pending in the application.
- 4a) Of the above claim(s) 18, 19 and 22-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-17, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 13 – 33 are pending where claims 18, 19, and 22 – 33 have been withdrawn from consideration. Claims 1 – 12 have been cancelled. No claims have been amended.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 13 – 17, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawabata et al. (US 5,626,694).

Kawabata is applied to claims 13 – 17, 20, and 21 as set forth in the October 15, 2010 Office action since no claims have been amended.

Double Patenting

5. Claims 13 – 17, 20, and 21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 8, 10 – 14, and 16 of U.S. Patent No. 7,806,993 in view of Kawabata et al. (US 5,626,694) as set forth in the October 15, 2010 Office action since no claims have been amended.

Response to Amendment

6. The declaration under 37 CFR 1.132 filed March 9, 2011 is insufficient to overcome the rejection of claims 13 – 17, 20, and 21 based upon Kawabata et al. (US 5,626,694) as set forth in the last Office action because: Fig. A is not commensurate in scope with the instant claims and does not demonstrate the criticality of either the added W% or the precipitated W% by comparing, for example, a steel with 0.004% precipitated W to a steel with 0.005% precipitated W and a steel with 0.11% precipitated W to a steel with 0.1% precipitated W. The example of Kawabata cited by Applicant in Fig. A from Table 4 No. 86 of Kawabata with 1.5% W which is not within the instant claimed range. However, the scope of Kawabata is not limited to the specific embodiments it teaches. See MPEP 2123. Rather, the Examiner relied on the broadest teaching of Kawabata which discloses in col. 3 lines 36-48 that the steel may comprise 0.1-5% W which overlaps with the instant claimed range. Therefore, in the absence of factual evidence to the contrary, the Examiner maintains the position set forth in the previous Office action and the above rejection that since the composition of the ferritic Cr-contained steel of Kawabata overlaps with the composition of the steel of the instant invention and since the steel of Kawabata is made using a method similar to the method of the instant invention, one of ordinary skill in the art would expect the steel of Kawabata to inherently have a similar amount of precipitated W and a similar average thermal expansion coefficient between 20 °C and 800 °C. See MPEP 2112.

Fig. B is also not commensurate in scope with the instant claims because it does not demonstrate the criticality of the added W% by comparing, for example, a steel with

Art Unit: 1733

2.04% added W to a steel with 2.05% added W and a steel with 6.01% added W to a steel with 6.0% added W. Rather, Fig. B only focuses on the claimed minimum composition of 2.05% W and does not demonstrate criticality for the upper limit of the claimed W compositional range of 6.0%. In addition, the closest comparison data point for the minimum claimed value of W of 2.05% is about 1% W as seen in Fig. B which is not close enough to the claimed minimum to demonstrate criticality. Furthermore, as discussed above, the scope of Kawabata is not limited to the specific embodiments it teaches. See MPEP 2123. Therefore, in the absence of factual evidence to the contrary, the Examiner maintains the position set forth in the above rejection that since the composition of the ferritic Cr-contained steel of Kawabata overlaps with the composition of the steel of the instant invention and since the steel of Kawabata is made using a method similar to the method of the instant invention, one of ordinary skill in the art would expect the steel of Kawabata to inherently have a similar amount of precipitated W and a similar average thermal expansion coefficient between 20°C and 800°C. See MPEP 2112.

Fig. C is also not commensurate in scope with the instant claims because it does not demonstrate the criticality of precipitated W% by comparing, for example, a steel with 0.004% precipitated W to a steel with 0.005% precipitated W and a steel with 0.11% precipitated W to a steel with 0.1% precipitated W. Rather, Fig. C only focuses on the claimed maximum composition of 0.1% precipitated W and does not demonstrate criticality for the lower limit of the precipitated W compositional range of 0.005%. Furthermore, as discussed above, the scope of Kawabata is not limited to the specific

Art Unit: 1733

embodiments it teaches. See MPEP 2123. Therefore, in the absence of factual evidence to the contrary, the Examiner maintains the position set forth in the above rejection that since the composition of the ferritic Cr-contained steel of Kawabata overlaps with the composition of the steel of the instant invention and since the steel of Kawabata is made using a method similar to the method of the instant invention, one of ordinary skill in the art would expect the steel of Kawabata to inherently have a similar amount of precipitated W and a similar average thermal expansion coefficient between 20°C and 800°C. See MPEP 2112.

Response to Arguments

7. Applicant's arguments filed March 9, 2011 have been fully considered but they are not persuasive.

Arguments are summarized as follows:

- a. Applicants respectfully submit that it is impermissible for the rejection to reject an argument because the Applicant is relying on specific embodiments when the rejection itself is based on specific embodiments. The rejection cannot have it both ways. The Applicant thus respectfully submits that the rejection is flawed in this regard.
- b. Applicants submit that Figs. A-C submitted in the 37 CFR 1.132 Declaration demonstrate unexpected results to those skilled in the art. The rejection states that the claimed amounts of precipitated W and associated physical characteristics would be inherently present. However, Applicants have taken the single example in Kawabata that is available to the Applicants and

Art Unit: 1733

demonstrated that the amount of precipitated W, when within the Applicants' claimed range, results in a steel which does not have the claimed physical characteristics as seen in Figs. A and B. In addition, Kawabata's example is actually outside of Applicants' claimed range. Fig. B shows unexpected results because the points within the claimed range are a sharp departure from the other points which show a relative flat line and then rapidly drops demonstrating a classic case of an unexpected phenomenon. Fig. C is similar because a number of data points are tightly packed together and then rapidly change over a small change in components. When this information is taken in the context of the disclosure of Kawabata, these results would be completely unexpected to one skilled in the art especially given the lack of disclosure with respect to W. This is particularly compelling since only one out of over a 100 examples of Kawabata make any reference to W at all.

c. The specific examples referred to in the rejection are simply inapplicable to the Applicants' steels because that example does not include any example having W at all.

Examiner's responses are as follows:

a. The Examiner cited the specific example of the method in col. 13 line 60-col. 14 line 67 to demonstrate a final annealing temperature within the instant claim 13 range. However, the Examiner also relied on the broadest disclosed range of Kawabata in col. 6 line 63-col. 7 line 5 of a final annealing temperature of 700°C-1300°C which overlaps with the instant claimed temperature range and

Art Unit: 1733

therefore a prima facie case still exists even without relying on the specific example of Kawabata.

b. The 37 CFR 1.132 Declaration was addressed above in the "Response to Amendment" section.

c. The Examiner explained above in response a that even if the specific example is not considered, a prima facie case of obviousness still exists. The Examiner also relied on the broadest disclosed range of Kawabata in col. 6 line 63-col. 7 line 5 of a final annealing temperature of 700°C-1300 °C which overlaps with the instant claimed temperature range and therefore a prima facie case still exists even without relying on the specific example of Kawabata.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAITLIN FOGARTY whose telephone number is (571)270-3589. The examiner can normally be reached on Monday - Friday 8:00 AM - 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Roy King/
Supervisory Patent Examiner, Art
Unit 1733

CF